



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,066	09/26/2003	Matthew Alan Michel	28,476	5865

21839 7590 07/30/2004

BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

HAYES, BRET C

ART UNIT	PAPER NUMBER
----------	--------------

3644

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,066

Applicant(s)

MICHEL, MATTHEW ALAN

Examiner

Bret C Hayes

Art Unit

3644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically, claim 10 depends upon claim 9, which depends upon claim 8. Other than the dependencies, the claims are identical.
2. Claims 3 and 14 are objected to because of the following informalities: (claim 3) line 4, "said last-mentioned means", should positively recite that means, such as --means for opening--; and (claim 14) line 2, "each row of projectiles" should be --each of the plural projectiles in mutually parallel relation--, for clarity. Appropriate correction is required.

Drawings

3. While no formal objection to the drawings is being made, examiner suggests replacing Figs. 6, 11 – 19 and 22 with actual drawings, as the details of what appear to be photocopies of photographs of the claimed invention are not as clear as drawings would be.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Art Unit: 3644

5. Claims 8 – 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Regarding claims 8, 11 and 12, the word "means" is preceded by the word(s) "bellows, collar, cable and spool" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

7. Further, claim 8 recites the limitation "said spool elements" in line 6. There is insufficient antecedent basis for this limitation in the claim.

8. Further, claim 11 recites the limitation "said spool means" in line 10. There is insufficient antecedent basis for this limitation in the claim.

9. Further, claim 12 recites the limitation "said spool means" in line 3. There is insufficient antecedent basis for this limitation in the claim.

10. Any unspecified claim is rejected as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3644

12. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,094,170 to Raynaud et al. (*Raynaud*).

13. Re – claim 1, Raynaud discloses the invention as claimed including a projectile dispenser, Fig. 5D, for example, having at least one expandable bellows **38**, at least one spool **84** for holding elongated projectiles **86** in unidirectional parallel relation, and at least one collar **36**; means for releasing, set forth at col. 5, line 37 (5:37), the at least one spool **84** in predetermined time relation from the dispenser, and means for releasing **88** the elongated projectiles **86** from the at least one spool **84** in specific sequence following separation from the dispenser.

14. Re – claim 3, Raynaud discloses in an airborne projectile dispenser, the improvement comprising: at least one spool **84** for supporting a plurality of projectiles **86** in substantially parallel relation, a collar **36** retaining the projectiles **86** within the at least one spool **84**, and means for opening, 5:37, the collar **36** to release the projectiles **86**, the means for opening, 5:37, including means for timing the period of release of said collar.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 2 and 4 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raynaud.

Art Unit: 3644

17. Re – claim 2, Raynaud discloses the claimed invention except for the expandable bellows **38** having an axis of expansion along a principal longitudinal axis. It would have been obvious to one having ordinary skill in the art at the time the invention was made to orient the expandable bellows to have an axis of expansion along a principal longitudinal axis, absent any showing to the contrary, as a matter of obvious design choice, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

18. Re – claim 4, Raynaud discloses the claimed invention including a strap **36** surrounding armaments **10** and means for breaking **38** the strap **36** except for timed means for cutting. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include timed means for cutting, since it was known in the art that timing and delay functions are necessary for accurate deployment.

19. Re – claim 5, Raynaud discloses the claimed invention except for the collars being of variable radial diameter relative to each other. It would have been an obvious matter of design choice to have the collars be of variable radial diameter relative to each other, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

20. Re – claim 6, Raynaud discloses the claimed invention except for the means for cutting including a capacitively powered circuit board. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the means for cutting include a capacitively powered circuit board, since capacitively powered circuits were known in the art to be used with cutting means.

Art Unit: 3644

21. Re – claim 8, Raynaud discloses the claimed invention as applied above, except for timing means for controlling expansion of the bellows. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include timing means for controlling, since it was known in the art that timing and delay functions are necessary for accurate deployment.

22. Re – claim 9 (and 10), Raynaud discloses the claimed invention as applied above, except for means for timing the ignition of the gas-powered means. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include means for timing the ignition, since it was known in the art that timing and delay functions are necessary for accurate deployment.

Allowable Subject Matter

23. Claim 11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

24. Claims 12 – 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

25. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record neither discloses nor fairly teaches the recited limitations of the claimed invention including, but not limited to: the collars being of variable radial diameter relative to each other offsetting laterally individual projectiles with respect to corresponding projectiles in other spools.

Art Unit: 3644

26. This statement is not intended to necessarily state all the reasons for allowance or all the details why the claims are allowed and has not been written to specifically or impliedly state that all the reasons for allowance are set forth (MPEP 1302.14).

Conclusion

Any inquiry concerning this communication should be directed to Bret Hayes at telephone number (703) 306 – 0553. The examiner can normally be reached Monday through Friday from 5:30 am to 3:00 pm, Eastern Standard Time.

If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached at (703) 306 – 4198. The fax number is (703) 872 – 9306.

bh

7/27/04


MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER